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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/651,072	08/28/2003	Alan Frank Parker	ROCKCO P61AUS	7263
20210	7590	12/06/2005	EXAMINER	
DAVIS & BUJOLD, P.L.L.C. FOURTH FLOOR 500 N. COMMERCIAL STREET MANCHESTER, NH 03101-1151			NEGRON, ISMAEL	
			ART UNIT	PAPER NUMBER
			2875	

DATE MAILED: 12/06/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

37

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/651,072	PARKER, ALAN FRANK	
	<b>Examiner</b>	<b>Art Unit</b>	
	Ismael Negrón	2875	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 29 September 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 11-19 and 21-28 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 11-18 and 21-27 is/are rejected.
- 7) ☒ Claim(s) 19 and 28 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 August 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)             | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date. _____  | 6) <input type="checkbox"/> Other: _____                                    |

## DETAILED ACTION

### *Response to Amendment*

1. Applicant's amendment filed on September 29, 2005 has been entered. Claim 11 has been amended. Claim 20 has been cancelled. Claims 21-28 have been added. Claims 11-19 and 21-28 are still pending in this application, with claims 11 and 21 being independent.
2. The indicated allowability of Claim 18 is withdrawn in view of the newly discovered reference(s) to KAYE (U.S. Pat. 4,929,021). Rejections based on the newly cited reference(s) follow.

### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 11, 14-16, 18, 21 and 24-26 are rejected under 35 U.S.C. 102(b) as being anticipated by KAYE (U.S. Pat. 4,929,021).
4. KAYE discloses an illumination device having:
  - **a body member (as recited in claims 11 and 21),** Figure 4, reference number 13;

- **at least one light source (as recited in Claim 11), Figure 4, reference number 26;**
- **the light source being aligned along a longitudinal axis of the body member (as recited in claims 11 and 21), column 4, lines 2-4;**
- **the light source lying within the body member (as recited in claims 11 and 21), as seen in Figure 4;**
- **the body member including at least one transparent region (as recited in claims 11 and 21), column 2, lines 34-36;**
- **light from the light source passing through the transparent region (as recited in claims 11 and 21), as seen in Figure 4;**
- **a plurality of transparent optical particles (as recited in claims 11 and 21), Figure 4, reference number 24;**
- **the optical particles being closely packed (as recited in claims 11 and 21), as seen in Figure 4;**
- **the optical particles lying in the body member (as recited in claims 11 and 21), as seen in Figure 4;**
- **the optical particles having uniform size and shape (as recited in claims 14 and 24), as seen in Figure 4;**
- **the optical particles varying in size over a spectrum of sizes (as recited in claims 15 and 25), column 3, lines 51-56;**
- **the optical particles having a similar shape (as recited in claims 16 and 26), as seen in Figure 4;**

- **the space inside the body member not occupied by the at least one light source or the optical particles is filled with at least one of air, gas or vapor (as recited in claims 18 and 21), inherent;**
- **the at least one of air, gas or vapor being maintained at a controlled pressure relative to atmospheric pressure (as recited in claims 18 and 21), inherent;**
- **the device including at least two light sources (as recited in Claim 21), column 4, lines 2 and 3.**

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 12, 17, 22 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over GEORGE, Jr. (U.S. Pat. 4,271,458) in view of LEW et al. (U.S. Pat. 4,600,974).

6. KAYE discloses an illumination device having:

- **a body member (as recited in claims 11 and 21), Figure 4, reference number 13;**

- **at least one light source (as recited in Claim 11), Figure 4, reference number 26;**
- **the light source being aligned along a longitudinal axis of the body member (as recited in claims 11 and 21), column 4, lines 2-4;**
- **the light source lying within the body member (as recited in claims 11 and 21), as seen in Figure 4;**
- **the body member including at least one transparent region (as recited in claims 11 and 21), column 2, lines 34-36;**
- **light from the light source passing through the transparent region (as recited in claims 11 and 21), as seen in Figure 4;**
- **a plurality of transparent optical particles (as recited in claims 11 and 21), Figure 4, reference number 24;**
- **the optical particles being closely packed (as recited in claims 11 and 21), as seen in Figure 4;**
- **the optical particles lying in the body member (as recited in claims 11 and 21), as seen in Figure 4;**
- **the optical particles being glass balls (as recited in claims 12 and 22), column 3, line 53;**
- **the body member being a tube of transparent material (as recited in claims 13 and 23), column 2, lines 34-39;**

- **the tube of transparent material forming the sole transparent region of the body member (as recited in claims 13 and 23), column 2, lines 34-39;**
- **the space inside the body member not occupied by the at least one light source or the optical particles is filled with at least one of air, gas or vapor (as recited in Claim 21), inherent;**
- **the at least one of air, gas or vapor being maintained at a controlled pressure relative to atmospheric pressure (as recited in Claim 21), inherent;**
- **the device including at least two light sources (as recited in claims 17 and 21), column 4, lines 2 and 3.**

7. KAYE discloses, or suggests, all the limitations of the claims except the light sources being light emitting solid state devices (as recited in claims 12 and 22); or at least one of the plurality of light sources having an output color different from that of at least one other of the light sources (as recited in claims 17 and 27).

8. The examiner takes Official Notice that the use of LEDs is old and well known in the illumination art. It would have been obvious to one of ordinary skill in the art at the time the invention was made to substitute an LED for the light source in the system of GEORGE, Jr. and LEW et al. (as recited in claims 12 and 22). One would have been motivated since LEDs are recognized in the illumination art to have many desirable advantages, including reduced size, high efficiency, low power consumption, long life, resistance to vibrations, and low heat production, over other light sources.

9. Regarding at least one of the plurality of light sources having an output color different from that of at least one other of the light sources (as recited in claims 17 and 27), it would have been obvious to one of ordinary skill in the art at the time the claimed invention was made to include light of different colors (as recited in claims 17 and 27) in the illumination device of KAYE as desired to suit the requirements of a desired illumination scheme, as per the teachings of KAY (see column 1, lines 47-51).

10. Claims 13 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over KAYE (U.S. Pat. 4,929,021).

11. KAYE discloses an illumination device having:

- **a body member (as recited in claims 11 and 21), Figure 4, reference number 13;**
- **at least one light source (as recited in Claim 11), Figure 4, reference number 26;**
- **the light source being aligned along a longitudinal axis of the body member (as recited in claims 11 and 21), column 4, lines 2-4;**
- **the light source lying within the body member (as recited in claims 11 and 21), as seen in Figure 4;**
- **the body member including at least one transparent region (as recited in claims 11 and 21), column 2, lines 34-36;**



- **light from the light source passing through the transparent region (as recited in claims 11 and 21), as seen in Figure 4;**
- **a plurality of transparent optical particles (as recited in claims 11 and 21), Figure 4, reference number 24;**
- **the optical particles being closely packed (as recited in claims 11 and 21), as seen in Figure 4;**
- **the optical particles lying in the body member (as recited in claims 11 and 21), as seen in Figure 4;**
- **the body member being a tube of transparent material (as recited in claims 13 and 23), column 2, lines 34-39;**
- **the tube of transparent material forming the sole transparent region of the body member (as recited in claims 13 and 23), column 2, lines 34-39;**
- **the space inside the body member not occupied by the at least one light source or the optical particles is filled with at least one of air, gas or vapor (as recited in Claim 21), inherent;**
- **the at least one of air, gas or vapor being maintained at a controlled pressure relative to atmospheric pressure (as recited in Claim 21), inherent;**
- **the device including at least two light sources (as recited in Claim 21), column 4, lines 2 and 3.**

12. KAYE discloses all the limitations of the claims, except the body member being made of glass (as recited in claims 13 and 23).

13. It would have been obvious to one of ordinary skill in the art at the time the claimed invention was made to use glass as the material of the body member of KAYE, since it has been held by the courts that selection of a prior art material on the basis of its suitability for its intended purpose is within the level of ordinary skill. *In re Leshing*, 125 USPQ 416 (CCPA 1960) and *Sinclair & Carroll Co. v. Interchemical Corp.*, 65 USPQ 297 (1945). In addition, it is noted that the instant specification is not only silent as to any advantage of using specifically glass as the material for the body member (as recited in claims 13 and 23), but specifically states that transparent plastics (such as the one disclosed by KAYE) are equally suited materials for the body member as the claimed glass. See paragraph 25, lines 5 and 6 of the specification as filed.

#### ***Relevant Prior Art***

14. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

**Eddins** (U.S. Pat. 6,336,735) disclose illumination devices having a tubular body member containing a plurality of optical particles. The optical particles diffuse light from a light source to evenly emit light across the surface of the body member. Eddins

specifically discloses the optical particles as being made of glass and having different sizes and/or shapes.

**Vodicka et al.** (U.S. Pat. 3,067,352) and **Pisciotta et al.** (U.S. Pat. 3,479,501) disclose light diffusers formed by a plurality of transparent optical particles, such particles being disposed around a light source.

***Allowable Subject Matter***

15. Claims 19 and 28 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

16. The following is a statement of reasons for the indication of allowable subject matter:

Applicant discloses an illumination device having a body member having at least one transparent region, at least one light source located inside the body member and disposed along a longitudinal axis of such member. Optical particles are located inside the body member and surrounding the at least one light source. The body member is a sealed enclosure with electrical conductors extending through a wall of such enclosure by means of a gas tight seal, for providing power to the light source.

17. No prior art was found disclosing individually, or suggesting in combination, the body member being a sealed enclosure with electrical conductors extending through a

Art Unit: 2875

gas tight seal on a wall of the enclosure, for providing power to the light source, in combination with the claimed illumination device.


**Conclusion**

18. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ismael Negron whose telephone number is (571) 272-2376. The examiner can normally be reached on Monday-Friday from 9:00 A.M. to 6:00 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sandra L. O'Shea, can be reached on (571) 272-2378. The facsimile machine number for the Art Group is (571) 273-8300.

19. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications maybe obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, go to <http://pair-direct.uspto.gov>. Should you have questions on access to Private PAIR system, contact the Electronic Business Center (EBC) toll-free at 866-217-9197.

  
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Examiner  
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THOMAS M. SEMBER  
PRIMARY EXAMINER